UNDERSEAWAREA

COMSUBNATO:

Providing Cooperative Security of Allied Undersea Forces

INSIDE

Q&A with the new COMSUBNATO
Enlisted Women on Submarines
F-1's 200-ft. Record Dive

NUPOC Competes for Graduates









UNDERSEAVARIA

THE OFFICIAL MAGAZINE OF THE U.S. SUBMARINE FORCE

COMSUBNATO:

Providing Cooperative Security of Allied Undersea Forces

Allied Maritime Command HQ MARCOM: An Insider Look at NATO Submarine Forces and the Admiral Who Commands Them

by Cmdr. Dave Benham, Chief Public Affairs Officer, MCNATO Coordinating submarine activities in the NATO AOR.

- Question and Answer with Rear Adm. Matt Zirkle by Cmdr. Dave Benham, Chief Public Affairs Officer, MCNATO Rear Adm. Zirkle details his vision for COMSUBNATO.
- NAVY Welcomes Enlisted Women to Submarine Force 12 by Kevin Copeland, Commander, Submarine Force Atlantic Public Enlisted women join Ohio and Virginia-class submarines.
- A Record Dive! 16 by Daniel J. Demers A carefully planned test dive of an F-1 escapes a tragic ending.
- **CONTINUITY OF POWER: How the Nuclear Propulsion** 20 Officer Candidate Program prepares the Next **Generation of Nuclear Power Officers**

by Lt. Donald Redding, Nuclear Programs Officer for Naval Recruiting Command

NUPOC, a real opportunity for top college grads.

On the Cover



Greek navy submarine HS Protefs is "forced" to surface off the coast of Sicily by a combination of NATO surface and air assets as part of Exercise Proud Manta. The event was observed by journalists embarked aboard Italian navy ship ITS Etna for a media availability to mark the end of the 14-day exercise. missions.

Departments

- **1** | Force Commander's Corner
- **Division Director's Corner**
- Letters to the Editor
- 23 | Sailors First
- 25 | Downlink

UNDESSEWARFARE is online at:www.public.navy.mil/ subfor/underseawarfaremagazine

FORCE COMMANDER'S CORNER

Vice Adm. Michael J. Connor, USN Commander, Submarine Forces



Submariners,

As you read this edition of *UNDERSEA WARFARE* Magazine, my hope is that these articles will walk you toward a greater understanding of how we develop our most important Submarine Force asset: the men and women who operate and maintain our submarines. The Submarine Force invests heavily in recruiting and retaining top-quality Sailors, building the most realistic, high tech trainers, and staffing those trainers with our best and brightest. This is why Navy Nuclear Prototype Training Unit (NPTU) shore duty is so highly valued in the Submarine Force.

Our search for the most talented and technically capable new recruits for submarine duty has also led us to the

decision to integrate women into the force. The first step was to integrate female officers in our submarine crews, and that program continues to be remarkably successful. The next step is to integrate female enlisted Sailors, and we are moving ahead full steam with that effort. The selection process for the first cadre of enlisted female Sailors to be assigned to submarines has already begun, and, judging from the number of applicants across the Fleet, we are off to a great start.

Likewise, our Nuclear Propulsion Officer Candidate Program allows us to compete for the most talented science, technology, engineering, and mathematics (STEM) students from the finest universities in our country to create the next generation of submarine officers. Leading a submarine watch team operating a nuclear-powered warship requires a unique combination of skills; we need smart, technologically savvy, and adventurous young men and women who are eager to learn and ready to lead. This drives a high demand for our most capable, enthusiastic, and hardest working STEM college graduates from the best universities across our nation. As I interact with the young men and women who have graduated from

"The Submarine
Force invests heavily in recruiting and retaining top-quality Sailors, building the most realistic, high tech trainers, and staffing those trainers with our best and brightest."

the Nuclear Propulsion Officer Candidate (NUPOC) program and are currently driving submarines at sea and leading divisions of Sailors, I am convinced that the talent and capacity of our officer's corps has never been better.

The Submarine Force has had a very good run, and our crews are performing well. There is no doubt in my mind that our submarines will continue to be a game changer in the undersea domain for years to come. Our adversaries, however, are running very hard to catch up. As a force, we are thankful for those who have gone before us, and we welcome the future that the next generation of Sailors will bring to the fight. I continue to take pride in the tremendous power and capacity of our submarines...and in the Sailors who operate them.

M. J. Connor



DIVISION DIRECTOR'S CORNER

Rear Adm. Joseph E. Tofalo, USN Director, Undersea Warfare Division

Undersea Warriors,

Greetings from our nation's capital! What an exciting year 2015 is shaping up to be. The budget approved for 2015 reflects that both Navy leadership and congressional policy makers recognize and understand the importance of undersea warfare to the National Defense Strategy. The pace of engagement with Congress regarding the President's Budget for 2016 is remarkable and also informs the process of building 2017's budget, which is already in progress.

The approved and future budgets continue to fully fund *Ohio* sustainment and R&D for Ohio Replacement (OR). Discussion with Congress has begun on how to fund OR once construction begins in FY21. Regardless of whether funding comes through a separate national account or from the Navy's shipbuilding account, both SECNAV and CNO testified that,

"Despite fiscal uncertainty, I am confident that we will continue to demonstrate that investments made in the undersea domain will ensure that we have a capable force to be where it matters, when it matters."

if the Navy does not receive significant "top-line" relief, we will be forced to fund this national asset at the expense of other Navy programs. Obtaining a 300+ ship Navy to support an increasing demand for global deployments, and maintaining a critical strategic commitment to the country and our allies is the reason for "top-line" relief. OR procurement is going to happen. The discussion is about responsibly accomplishing both goals.

The defense spending plan also supports continuing to build two *Virginia*-class SSNs per year. As SSN force structure begins to decline, continuing two per year is needed to mitigate the shortfall below the requirement of 48 SSNs. The budget submission also continues support for integrating the Virginia Payload Module (VPM) into Virginia Block V in order to mitigate the loss of strike capacity as SSGNs begin to retire in 2026. If you think about it, VPM also changes undersea warfare because of the access and opportunity submarines provide for a host of specialized payloads.

We continue to deliver *Virginia*-class submarines under cost and ahead of schedule. You expertly deploy to provide deterrence, intelligence, and unparalleled advantage

across the spectrum of conflict if required. Your collective achievements, hospitality and professionalism while hosting distinguished visitors, and our messaging of those accomplishments here in D.C. garner us tremendous credibility with our nation's leadership. Despite fiscal uncertainty, I am confident that we will continue to demonstrate that investments made in the undersea domain will ensure that we have a capable force to be *where* it matters, *when* it matters. As we move ahead, I thank all of you for your outstanding and tireless contributions.

J. E. Tofalo

UNDERSEAVERE

The Official Magazine of the U.S. Submarine Force

Vice Adm. Michael J. Connor

Commander, Submarine Forces Commander, Submarine Force Atlantic

Rear Adm. Phillip G. Sawyer

Deputy Commander, Submarine Forces Commander, Submarine Force U.S. Pacific Fleet

Rear Adm. Joseph E. Tofalo

Director, Undersea Warfare Division (N97)

Master Chief Petty Officer Wes Koshoffer

COMSUBLANT Force Master Chief

Master Chief Petty Officer Russ Mason

COMSUBPAC Force Master Chief

Lt. Cmdr. Tommy Crosby

COMSUBLANT Public Affairs Officer

Cmdr. Brook DeWalt

COMSUBPAC Public Affairs Officer

Military Editor: Lt. Cmdr. Jeffrey Gammon

Senior Editor,

Design & Layout: Rick Johnston Managing Editor: Thomas Lee

Charter

UNDERSEA WARFARE is the professional magazine of the undersea warfare community. Its purpose is to educate its readers on undersea warfare missions and programs, with a particular focus on U.S. submarines. This journal will also draw upon the Submarine Force's rich historical legacy to instill a sense of pride and professionalism among community members and to enhance reader awareness of the increasing relevance of undersea warfare for our nation's defense.

The opinions and assertions herein are the personal views of the authors and do not necessarily reflect the official views of the U.S. Government, the Department of Defense, or the Department of the Navy.

Contributions and Feedback Welcome

Send articles, photographs (min. 300 dpi electronic), and feedback to:

Military Editor, Undersea Warfare CNO N97 2000 Navy Pentagon, Washington, DC 20350-2000 E-Mail: underseawarfare@hotmail.com Phone: (703) 614-9372 Fax: (703) 695-9247

Subscriptions for sale by the Superintendent of Documents

P.O. Box 97950, St. Louis, MO 63197 or call (866) 512-1800 or fax (202) 512-2104. http://bookstore.gpo.gov Annual cost: \$25 U.S.; \$35 Foreign

Authorization

UNDERSEA WARFARE (ISSN 1554-0146) is published quarterly from appropriated funds by authority of the Chief of Naval Operations in accordance with NPPR P-35. The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law of the Department of the Navy. Use of funds for printing this publication has been approved by the Navy Publications and Printing Policy Committee. Reproductions are encouraged with proper citation. Controlled





LETTERS TO THE EDITOR

In keeping with UNDERSEA WARFARE Magazine's charter as the Official Magazine of the U.S. Submarine Force, we welcome letters to the editor, questions relating to articles that have appeared in previous issues, and insights and "lessons learned" from the fleet.

UNDERSEA WARFARE Magazine reserves the right to edit submissions for length, clarity, and accuracy. All submissions become the property of UNDERSEA WARFARE Magazine and may be published in all media.

Please include pertinent contact information with submissions.

Send submissions to:
Military Editor
Undersea Warfare CNO N97
2000 Navy Pentagon
Washington, DC 20350-2000 or
underseawarfare@hotmail.com

FROM THE EDITOR

Make Guam your next assignment!

Take a look at why Guam should be your next duty station of choice!

Checkout the following YouTube video for a firsthand look at life on the beautiful Pacific island of Guam.



https://www.youtube.com/watch?v=MCArXaer S8



Like us on Facebook at http://www.facebook.com/USWMagazine



Follow us on Twitter at http://twitter.com/USWMagazine

Sailors First Has a New Home!

If you turned to this page expecting to see the customary Sailors First photo, we are pleased to announce Sailors First has a new location on page 23 and is joined by a variety of news items and other information that we hope will be of interest to the enlisted Submariner.

Allied Maritime Command HQ MARCOM

An Insider's Look at NATO Submarine Forces, and the Admiral Who Commands Them

As night falls, the jet black Norwegian submarine HNoMS *Utsira* (\$ 301) glides silently, almost invisibly, through the near-freezing waters off her home port, preparing to submerge and attack. For the next two weeks, the submarine will take turns hunting and being hunted as she joins two Allied submarines, 10 surface ships, four maritime patrol aircraft, and several helicopters representing eight Allied nations for Exercise DYNAMIC MONGOOSE 2014.

"Tenacity, Dick, stay with the bastard till he's on the bottom."

-- Lt.Cmdr. D.W. "Mush" Morton to XO Lt. Richard O'Kane, USS Wahoo (SS238)



The exercise is one of several NATO submarine exercises and operations run by the single Allied submarine operation authority (SUBOPAUTH), NATO's Allied Submarine Command (COMSUBNATO).

COMSUBNATO

Just inside the western edge of the M25 loop that surrounds the city of London lies Northwood Headquarters, a major United Kingdom military base that houses, among other tenant commands, COMSUBNATO and its dedicated team of 26 Submariners representing the 13 Allied submarine operating nations. Just over two years in existence, COMSUBNATO is now matured and demonstrating full operational capability in support of NATO Allied Maritime Command's mission.

Commanded by U.S. Navy Rear Adm. Matt Zirkle, COMSUBNATO mans a 24/7/365 submarine control and watch to manage and maintain SUBOPAUTH over all Allied submarines operating in direct support of NATO missions or exercises. This responsibility was previously split across three commands but was consolidated in 2013 under the sole command of COMSUBNATO, which is now the submarine operations focal point for NATO, encompassing operations, exercises, doctrine, and advocacy.

COMSUBNATO maintains a continuous controller watch as well as continuous broadcast control authority whether submarines are under NATO operational control (OPCON) or not. This includes control authority for the very low frequency (VLF) broadcasts specific to submarines under NATO OPCON.

The waterspace management region that COMSUBNATO controls stretches from the Arctic to the Eastern Atlantic, the Baltic, the Mediterranean, and into the northwestern corner of the Indian Ocean. COMSUBNATO serves as the Submarine Movement Advisory Authority (SMAA) to deconflict undersea transits and operations among the Allied nations and partners who participate in this navigation safety plan.

"It has been extremely gratifying to work with my staff and these 13 submarine-operating Allied countries," said former COMSUBNATO Commander, Rear Adm. Kamensky. "They represent a tremendous capability both intellectually and professionally from which NATO benefits, and it has been my privilege to lead them."



The Norwegian *Ula*-class submarine *Utstein* (KNM 302) participates in NATO exercise Odin-One. The Norwegian submarine and other naval vessels joined U.S. active and reserve anti-submarine forces, including the stealth nuclear-powered submarine, USS *Seawolf* (SSN 21). The mission of the North Sea War-time exercise was to hunt Allied and NATO submarines.



Operations and Exercises

Exercise DYNAMIC MONGOOSE 2014 is one of two major anti-submarine warfare (ASW)-related exercises that NATO conducts each year, and it specifically focuses on sharpening the skills on the high-end warfare capabilities associated with ASW. The extremely challenging environment is precisely the environment in which NATO might potentially face an adversary: at sea and with an integrated set of air, surface, sub-surface, and intelligence assets.

"With the fusion of these four capabilities all toward a single mission focused on ASW, it becomes very complex and very demanding," said Rear Adm. Kamensky. "Mongoose ties all that together. Through a series of 'crawl/walk/run' events, we take it from the basic building blocks to the more complex integrated operation to allow for that sharpening of the blade in order to retain the skills. DYNAMIC MONGOOSE 14 was able to effectively complete this, and this type of exercise is in high demand."

The strength of the NATO Alliance is the combined might of all 28 member nations. For that strength to be effective,

these forces must be interoperable with one another, capable of fighting as a team, without language barriers or doctrinal differences getting in the way.

For Allied submarines, COMSUBNATO provides a critical capability in coordinating and assuring unity of effort among the diverse submarine-operating Allies. NATO submarines have provided realistic ASW and anti-surface warfare components to the annual NATO Response Force certification exercises, formerly the MARINER series, which most recently were held as Exercise NOBLE JUSTIFICATION 2014 in the Mediterranean waters off Spain. Notably, for the 2014 event, COMSUBNATO exercised operational control of five Allied submarines, each from a different nation, showing the capability and capacity necessary for this single SUBOPAUTH.

Allied submarines also provide vital intelligence, surveillance, and reconnaissance (ISR) support to ongoing operations of COMSUBNATO's higher headquarters, NATO Allied Maritime Command. In 2012, a Royal Netherlands Navy submarine provided direct support to NATO's counter-piracy Operation OCEAN SHIELD off the Horn of Africa, contributing surveillance intelligence on pirate action group (PAG) activity to counterpiracy surface forces operating in the area.

COMSUBNATO also periodically has submarines directly supporting NATO's counterterrorism Operation ACTIVE ENDEAVOUR in the Mediterranean, providing covert ISR. Transiting submarines have also been a significant source of information for the sole active Article V collective defense operation in NATO. These submarines use their sensors and communicate anomalous information to COMSUBNATO, just as would surface ships or aircraft as part of the overall network of systems that contributes to the operation. "The strength of the NATO
Alliance is the combined
might of all 28 member
nations. For that strength
to be effective, these forces
must be interoperable with
one another, capable of
fighting as a team, without
language barriers or doctrinal differences getting
in the way."

LRS SRV 1

SNRS and HMS *Belos* during DYNAMIC MONARCH submarine rescue exercise 15 May 2014

Medics inside decompression chamber on board HMS *Belos* during submarine rescue exercise DYNAMIC MONARCH 15 MAY 2014

Submarine Rescue

In the perpetually chilly waters off Gdynia, Poland, a submarine lies stranded on the bottom, its crew of 35 Sailors anxiously awaiting rescue.

On the surface, the crew of the Swedish submarine rescue support ship HSwMS *Belos* (A 214) works feverishly to deploy the NATO Submarine Rescue System (NSRS), a small worldwide-deployable rescue submersible capable of diving to 610 meters and mating with virtually any of the world's submarines, to transfer up to 15 trapped Sailors at a time.

In the medical bay of HSwMS *Belos*, doctors and medical technicians prepare to receive the injured and transfer them under pressure to the on-board decompression chamber. The clock is ticking, and time is not a trapped Submariner's friend.

Belos, though not operated by a NATO member state, was the closest rescue support vessel to the scene, a critical factor in executing a speedy rescue mission. So when the call came from the International Submarine Escape and Rescue Liaison Office (ISMERLO), the NATO partner nation's navy quickly swung into action.

These activities are part of the NATO submarine rescue exercise DYNAMIC MONARCH 2014, held last May. Were this a real submarine rescue incident, the

Photo by Flt.SGT Cedric Artigues/FRAF

Photo by FLt.SGT Cedric Artigues/FRAF

Sailors of the stricken submarine and their families could rest assured knowing that trained professionals such as these are ready and waiting for the call to respond.

Technology and Budget

Staying on the cutting edge of technology is vital to maintaining NATO's edge over its potential adversaries. To that end, NATO nations have shown their commitment to modernizing their submarine forces, and this extends well beyond the U.S. development of the *Virginia*-class, the *Ohio*-class replacement, and the SSGN conversions.

New submarine builds are in progress in Turkey, Greece, Italy, Spain, the United Kingdom, France, and Germany. Other new builds are in the planning stages in the Netherlands, Norway, Poland and Sweden. Portugal has two *Tridente*-class submarines commissioned within the past five years, and Canada is re-vitalizing its *Victoria*-class for operations.

This Allied commitment to submarine development is vital to Alliance security, as several nations on the world stage that never previously operated submarines have recently purchased them on the open market.

"I'm thinking of Singapore, Malaysia, Indonesia, Vietnam, Iran," said Rear Adm. Kamensky. "These are just a few of several countries who, 25 years ago, did not have submarines but now have some of the most advanced diesel-electric submarines, submarines that can be employed by their armed forces. That is a potent capability. And depending upon how it's employed can be to our benefit or to the Alliance's detriment."

Unmanned systems have also received significant attention from Allied navies, with Unmanned Underwater Vehicles (UUVs) being developed by individual nations. Some of the research, development, testing and evaluation (RDT&E) is being conducted by NATO's Centre for Maritime Research and Experimentation (CMRE), located in La Spezia, Italy.

As with virtually all areas of military development, financial limitations are perhaps the greatest hindrance. Compounding this strain, only a handful of Allied nations actually meet the 2% GDP military spending target set by NATO Headquarters in

Brussels. COMSUBNATO continues to advocate on behalf of submarine capabilities to the Allied nations in order to maintain proper visibility and perspective on submarine forces at national levels. Allied submarines are a strategic capability, and they need to receive the military budget shares commensurate with that capability.

"The danger associated with stepping away from maintaining a submarine force capability is that, once you step away from it, you will not be able to reconstitute it," said Rear Adm. Kamensky. "The cost for entry is too high."

Conclusion

During its first two years, COMSUBNATO has established a high standard for delivery of high-end submarine warfighting capabilities to NATO under a single command, both through existing operations and exercises. The command has demonstrated that the established linkages, interoperability, and capabilities are present to launch a timely, well-executed rescue operation if a submarine becomes disabled in an area conducive to such an operation. NATO's submarine forces are taking a forward-looking approach, prudently investing in modernization to ensure that their forces are able to meet the challenges that future maritime operations will require.

Cmdr. Benham is a former Chief of Public Affairs at Commander Submarine Forces Pacific (COMSUBPAC).

"Staying on the cuttingedge of technology is vital to maintaining NATO's edge over its potential adversaries."



"The danger associated with stepping away from maintaining a submarine force capability is that, once you step away from it, you will not be able to reconstitute it."

Question and Answer with Rear Adm. Matt Zirkle



On January 16, 2015, Rear Adm. Matt Zirkle relieved Rear Adm. Bob Kamensky as Commander Submarine Forces NATO (COMSUBNATO). NATO Allied Maritime Command Public Affairs Officer Cmdr. Dave Benham sat down with COMSUBNATO's new commander shortly after the change of command to talk about the way ahead.

Admiral, you've taken command of a dynamic and diverse team of Submariners as COMSUBNATO. What are your first impressions of the staff, and what are your priorities for the coming year?

I am greatly impressed by the experience and professionalism of the staff. It is very clear that the submarine-operating NATO nations consider the functions of COMSUBNATO to be highly important, and this is reflected in the calibre of personnel assigned. My highest priorities right now are submarine safety and operational excellence. Submarine safety has been and will always be COMSUBNATO's top priority. Other nations expect this of us and that is what we deliver. Operational excellence is achieved through exercise planning and execution, coordinated operations, and continued improvement.



2014 featured two anti-submarine warfare live exercises in February's DYNAMIC MONGOOSE and October's DYNAMIC MANTA, the latter of which was folded into the larger NOBLE JUSTIFICATION exercises. What do the 2015 MANTA, MONGOOSE, and TRIDENT JUNCTURE exercises hold in store for NATO Submariners? How are you looking to improve or break new ground in these exercises?

These exercises are designed to provide unitand force-level training to the participants in multiple operating environments. It gives them guaranteed interactions, allowing for operator training, equipment testing, and doctrine verification. Complex exercises such as these allow our forces to practice joint operating area anti-submarine warfare with coordination of air, surface, and subsurface assets. Additionally, after analysis, the exercises provide us areas that we can concentrate on for improvement.

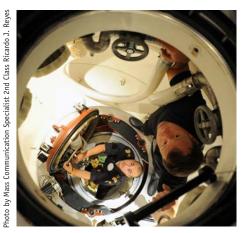


Submarine safety has been and will always be COMSUBNATO's top priority. Other nations expect this of us and that is what we deliver. Operational excellence is achieved through exercise planning and execution, coordinated operations, and continued improvement.

In the area of submarine rescue, we understand that ISMERLO* is in the process of being transferred to Northwood in England. How close to completion are we in that process, and what's next for ISMERLO?

The personnel and functionality transfer will be completed this summer, to be verified by conducting a submarine rescue table top exercise. The next step is a complete redesign and modernization of the program website with inputs from all participating nations. The website is a key piece of the ISMERLO functionality since it is the most efficient method of sharing data and coordinating efforts on a global scale. This is a longer-term project, with the targeted completion set for early 2017.

Staying with submarine rescue, 2017 will feature the next in the MONARCH series of NATO submarine rescue exercises. What's in store for this exercise?



Personnel assigned to the Portuguese navy submarine SKS *Tridente* (S 70) climb down to their submarine after mating with the U.S. Navy Submarine Rescue Diving and Recompression System's (SRDRS) Pressurized Rescue Module (PRM), *Falcon*, during the NATO exercise Bold Monarch 2011.

United Kingdom's submarine rescue vehicle *LR-5* tested their ctapabilities to rescue Sailors on submarines from the ocean's depths during the North Atlantic Treaty Organization (NATO) submarine escape and rescue exercise Sorbet Royal 2005. Twenty-seven participating nations, including 14 NATO nations tested their capabilities and interoperability.

DYNAMIC MONARCH 2014, in the waters off Gdynia, Poland, featured new ground with not just locating and mating with disabled submarines, but also transfer under pressure of personnel and a heavy focus on the medical care necessary to complete the process of submarine rescue, minimizing loss of life and injury. Training in submarine rescue is an iterative process, building upon the successes and lessons of the prior exercises. Turkey has graciously offered to host the 2017 edition of DYNAMIC MONARCH, and we aim to improve upon the previous exercise through better strategic communication, highlighting the interoperability and humanitarian aspects of the exercise.



5. Navy photo by Chief Journalist Dave Fliesen



A lot has been said publicly about NATO's maritime component contributions to Allied assurance measures. Going forward in 2015, how do you see NATO submarines contributing to sustained assurance measures?

Submarines are a key part of the strategic maritime plan. While I can't discuss specific operations or plans, I assure you that NATO submarines are contributing to sustained assurance measures.

2014 saw greater integration of submarines with Standing NATO Maritime Groups in support of NATO counter-terrorism Operation ACTIVE ENDEAVOUR. How do you see submarines building on this support in 2015?

We are continuing this initiative in 2015. We found that it provided excellent opportunities to the ships' crews for coordinated operations between sub-surface, surface, and air assets. The submarine provides a unique skillset, ideally suited to ACTIVE ENDEAVOUR objectives, which greatly multiplies the effectiveness of the Standing NATO Maritime Groups.

How does COMSUBNATO plan to build upon its engagement with submarineoperating nations, both within the alliance and with partner nations?

We rely upon open communications with and between the national submarine force commanders. One way to maintain this is by continuing our annual staff and commanders' conferences. Another is by maintaining an open-door policy with my staff and the submarine forces that we serve. Exercises are another key engagement opportunity with

About Rear Adm. Matt Zirkle

After receiving his commission from Naval Officer Candidate School in 1985, Rear Adm. (Select) Matt Zirkle, a native of Hinsdale, Ill., completed initial nuclear power and submarine training and was assigned to USS *Parche* (SSN 683) where he qualified as a submarine warfare officer and nuclear engineer officer. Zirkle also made deployments in USS *Pintado* (SSN 672) and USS *Pogy* (SSN 647) to the Arctic and Western Pacific.

In 1989, Zirkle affiliated with the Navy Reserve and since then has commanded nine reserve units. His tours of duty include leadership roles in the Submarine Force, Naval Coastal Warfare, U.S. Naval Forces Korea, Naval Control and Protection of Shipping, a

Joint Task Force, the U.S. Pacific Fleet, and the U.S. Pacific Command. Most recently Zirkle served as director, Strategic Communications, U.S. Submarine Force Reserve Component.

Zirkle returned to active duty in 2006 serving on the OPNAV staff as a Navy Crisis Action Team Chief at the Pentagon where he monitored all U.S. Navy operations and events worldwide. In 2009, Zirkle mobilized as chief of staff, Commander Task Force Iraqi Maritime in Bahrain directing a headquarters staff of U.S. and UK navy personnel responsible for the protection of Iraq's oil terminals and territorial waters while transitioning this mission to the Iraqi Navy.



Rear Adm. Matt Zirkle, relieves Rear Adm. Bob Kamensky, as Commander, Submarine Forces NATO (COMSUBNATO) and Deputy Chief of Staff, Submarines, for NATO Allied Maritime Command (MAR-COM), at an informal ceremony in Northwood, UK.

Zirkle was promoted in October 2014 to Rear Admiral (lower half) and took command of Allied Submarine Forces at NATO's Maritime Command, Northwood, UK in January 2015. Zirkle is also a graduate of the Marine Corps Institute's Command and Staff College Distance Education Program and is currently enrolled in the Joint Forces Staff College Advance Joint Professional Military Education (AJPME) course.

His personal decorations include the Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal (three awards), Navy Commendation Medal (four awards), Navy Achievement Medal (four awards), and various unit and campaign awards.

alliance and partner nations. The relationships established between the various command staffs are vital to efficient operation of the enterprise, allowing differences and disputes to be sorted out by communication at the staff officer level before they become political or diplomatic sticking points.

*ISMERLO: International Submarine Escape and Rescue Liaison Office is an office dedicated to the global humanitarian effort for the coordination of search and rescue for military disabled submarines.

erving aboard a submarine is certainly no pleasure cruise for anybody, but a select number of dedicated women are already charting a new course in the U.S. Navy by choosing to serve in its Submarine Force. These capable young women could have chosen less demanding paths, but they chose to serve in a variety of important jobs aboard ballistic and guided missile submarines, and now fast attack submarines, in the Navy's Atlantic and Pacific fleets. Female officers have already qualified in submarines and have completed multiple strategic deterrent patrols and SSGN deployments. The Navy's commitment to allowing women to serve on submarines went from idea to reality in just a few short years.

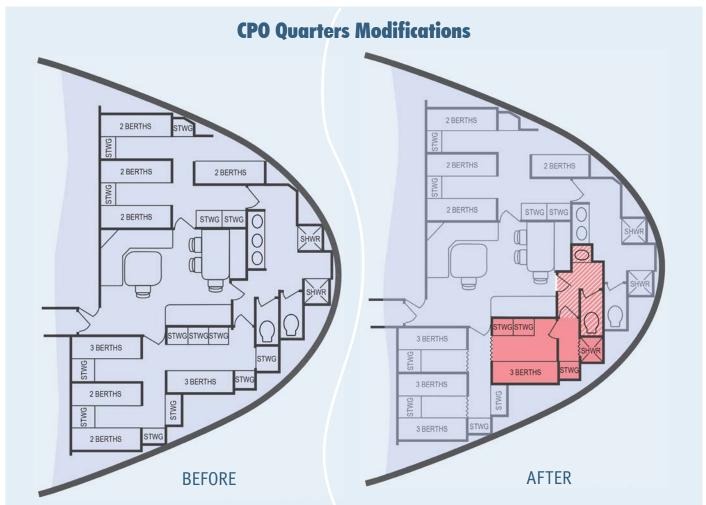
In January 2015, Chief of Naval Operations (CNO) Jonathan Greenert announced that the Submarine Force will immediately open service on submarines for enlisted female Sailors. In Naval Administrative (NAVADMIN) message 19/15 titled, "Opening Submarine Force Billets to Enlisted Women," the CNO outlined the integration plan, which includes

opening all submarine ratings and Navy enlisted classification codes to enlisted women in Fiscal Year 2015 for a two-phase integration aboard the *Ohio*-class nuclear ballistic missile submarines (SSBNs) and guided missile submarines (SSGNs) and the *Virginia*-class attack submarines (SSNs).

"We are the most capable submarine force in the world," said Vice Adm. Connor, com-

mander, Submarine Forces. "While we have superb technology, the ultimate key to our success is our people. In order to continue to improve and adapt in a rapidly changing world, we need to ensure that we continue to recruit and retain the most talented Sailors. Today, many of the people who have the technical and leadership skills to succeed in the Submarine Force are women. We will need them. Integrating female officers into the Submarine Force has increased our talent pool and subsequently the force's overall readiness, ensuring that we will remain the world's most capable force for ensuing decades. Following our successful and smooth integration of women officers into the Submarine Force, the Navy plans to integrate female enlisted is a natural next step."

On July 28, 1994, Congress was notified of policy changes to expand the number of assignments available to women in the



CPO berthing increases from 18 to 20 personnel (17 men, 3 women) with women having an enclave consisting of three bunks with a private shower. The existing CPO head will be partitioned with the male portion retaining the existing 2 showers, 2 of the 3 lavatories and 1 of the 2 waterclosets. The female head consisting of 1 watercloset and 1 lavatory will be designed for male/female alternate utilization.

Navy. The change was not considered by the Submarine Force until former Secretary of Defense Robert Gates formally presented a letter to congressional leaders on Feb. 19, 2010 notifying them of the Department of the Navy's desire to reverse current policy of prohibiting submarine service to women.

The Navy began phased integration of women officers on submarines in 2011. Since then, 14 crews on seven boats (three SSBNs and four SSGNs) have been integrated. This year two SSN crews were integrated—USS *Virginia* (SSN 774) and USS *Minnesota* (SSN 783)—with two more planned next year. Since 2011, more than 100 women have been accepted into submarine service with several already completing their first tour.



Machinist's Mate 2nd Class Christina Gillen tests for chloride in a steam sample Photo by Mass Communication Specialist Seaman James R. Evans

In addition to NAVADMIN 19/15, the CNO has also released two messages outlining conversions to submarine rating specialties; NAVADMIN 20/15 announces the "FY16 Enlisted Women in Submarines Chief Petty Officer Conversion," and NAVADMIN 21/15 announces the "FY16 Enlisted Women in Submarines E-6 and Below Rating Conversion Process." Rear Adm. Charles A. "Chas" Richard, commander, Submarine Group 10 and leader Women in Submarines Task Force said the two-phase integration will begin in FY16.

"The Submarine Force's integration of female officers on our submarines has been very successful," said Richard. "We will mirror that successful pattern during the integration of enlisted females, which will be done in two phases. During the initial phase we will select and train Sailors for service aboard female-officer-integrated SSBNs and SSGNs in the U.S. Atlantic and Pacific Fleets. In 2016 we will integrate the first two crews, the Blue and Gold crews of the guided-missile submarine USS *Michigan* (SSGN 727), and continue with 12 addi-

tional crews roughly over a five-year period through 2021. The second phase will consist of integrating the crews of new construction *Virginia*-class SSNs. The plan minimizes operational impacts and provides optimal flexibility, equity, and timeliness at reasonable cost," said Richard.

"In addition to new accessions into the submarine community, our plan presents an opportunity for female Sailors in selected ratings and from pay grades E-1 (seaman recruit) to E-8 (senior chief petty officer) to convert into Submarine Force ratings. All prospective female enlisted Sailors will be provided the same opportunity to succeed in the Submarine Force as their male counterparts."

Chief Petty Officers (CPOs) currently serving as information technicians (IT), yeoman (YN), culinary specialist (CS), logistical specialist (LS), and independent duty corpsman (HM/IDC) may apply for direct conversion immediately. These CPOs will be the first enlisted women assigned and will arrive in sufficient time to fully integrate prior to junior personnel arriving. This will allow these CPOs to bring their current expertise and leadership skills aboard the submarine quickly, which will be essential in follow-on integration. Following selection, CPOs will attend Basic Enlisted School in Groton, Conn.

Women volunteering to serve in non-nuclear enlisted ratings will join the Submarine Force through both new accessions and conversions. New accessions will require completion of Navy Training Command (boot camp) in Great Lakes, Ill.; Basic Enlisted Submarine School (BESS) in Groton, Conn.; rating "A" school at various sites; and then assignment to the fleet. The only exceptions will be those females who elect to become culinary specialists (CS), logistics specialists (LS), and yeoman (YN). They will complete their rating "A" school in Meridian, Miss. before entering BESS in Groton. Women currently serving in the fleet who wish to convert to a submarine rating must complete the two-month BESS.

The prospective enlisted women volunteering to serve in nuclear enlisted ratings will join the Submarine Force through the new accessions pipeline only. This will require completion of Navy Training Command (boot camp); Nuclear Field "A" School and Nuclear Power School at Navy Nuclear Power Training Command in Charleston, S.C.; prototype training at Naval Nuclear Power Training Unit in either Charleston or Ballston



Machinist's Mate 1st Class Christopher Atkins supervises as Machinist's Mate 3rd Class Amber Taylor disassembles a fuel oil air cut-out valve. Photo by Mass Communication Specialist 2nd Class James R. Evans

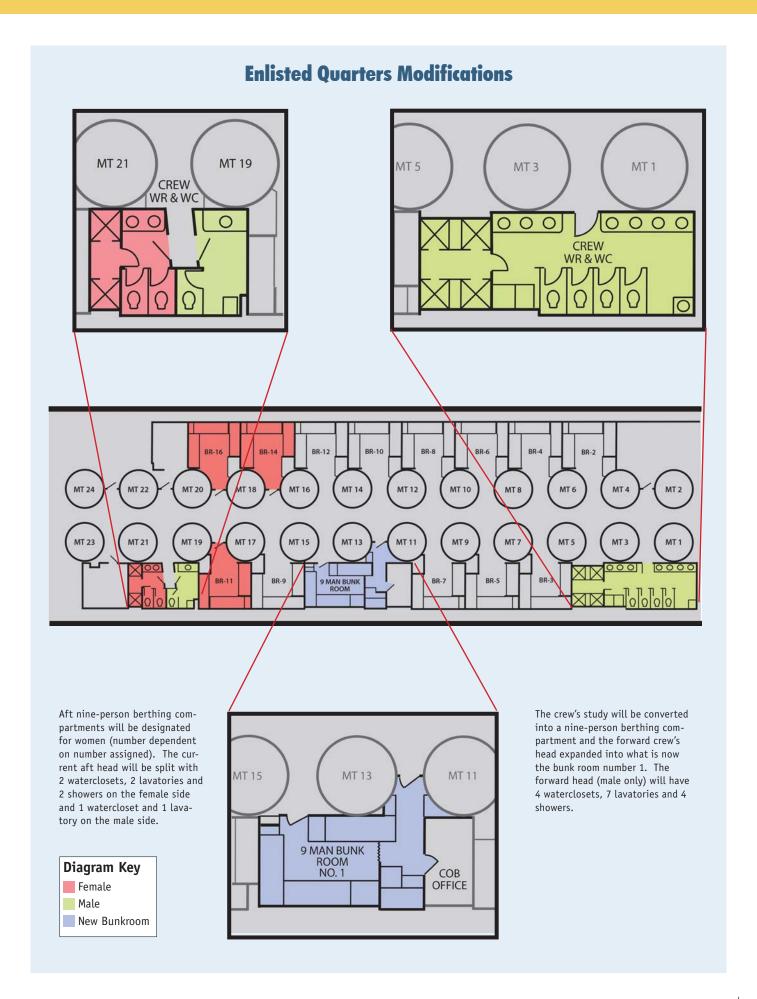
Spa, N.Y.; and then assignment to the fleet.

Supporting the integration of submarine crews will require modifications of the SSBNs, SSGNs, and new construction Virginia-class SSNs. These modifications will ensure that conditions meet Navy guidelines for habitability and privacy while maintaining equity for male and female Sailors embarked on submarines. The modifications to the SSBNs/SSGNs will include creating a women's head and berthing area inside the CPO quarters, splitting the aft crew's head into designated male and female sections, expanding the size of the forward crew's head (male only), and converting the crew's study into an additional nine-person berthing compartment. Modifications to the Virginia-class are still being designed and will be incorporated into new construction of Block IV Virginias.

More information on the opportunities available and the benefits of service in the Submarine Force is available via the Navy Personnel Command website at http://www.public.navy.mil/bupers-npc/enlisted/community/submarine/pages/enlistedwomeninsubmarines.aspx.



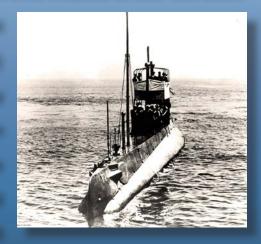
Hopsital Corpsman 1st Class Angela Kennedy screens the names of Sailors who have turned in their Thermo Luminescent Dosimetry (TLD) devices. Photo by Mass Communication Specialist Seaman Nicholas A. Groesch



Lt. Simeon Smith and his crew of seven sat nonchalantly on the bottom of San Francisco Bay.

They were eating turkey sandwiches, drinking celebratory champagne and chatting about the "easy-money bonus" they had just made for their daredevil dive. Situated at 200 feet below

the bay, the volunteers had just set the world's deepest diving record to date. On the surface a tender (i.e., barge) holding naval officers from the inspection board headed by Commandant Charles A. Gove of the Navy Training Station stood by to certify the depth and duration of the dive to assure the newly built submarine USS *Carp* (SS 20) would meet government specifications. The dive was to last 10



minutes and was designed to ensure that the submarine would not leak under the "enormous pressure," reported the *San Francisco Chronicle*. Just two days prior, April 15, 1912, the R.M.S. *Titanic* had sunk in the North Atlantic. While the craft had been renamed *F-1* in November of 1911, the press continued to refer to her as *Carp*.

he Navy selected a site at Raccoon Straights between Sausalito and Angel Island because, at high tide, it accommodated the 200 foot depth specified. Since the depth was "confined to such a small area" the submarine was actually hauled down to the bottom by use of a 10-ton weight that "had been previously dropped [to] the required depth," according to Lt. Smith. The Carp's anchor was unshackled from its wire cable which was then "bent on the [10 ton] weight" and lowered. The ballast tanks were "partially filled...[allowing retention of] about one and a half tons of positive buoyancy," explained Smith. The crew then winched the boat down to the weight using its anchor motor windlass. The 10-ton weight being heavier than the sub caused "the boat [to go down] instead of the anchor coming up." It was the greatest depth "a man has ever gone, inasmuch as previous boats have been tested to this depth with no person on board," Smith proudly proclaimed.

A Technological Wonder

Carp, 144 feet long and 13 feet in diameter, had been launched on September 6, 1911 at the Union Iron Works shipyard in San Francisco at a cost of \$535,000 [\$13.5 million in 2014 dollars]. Nine year-old J.J. Tynan, daughter of the general manager of the Works, had christened the sub with



Newspaper clipping from the San Francisco Call, July 24, 1911.

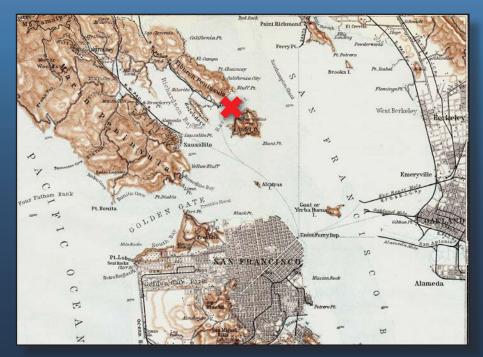




Image and text provided by Washington State Library; Olympia, W

the "beribboned champagne bottle against the knife-like bow." It had taken two years to construct—four others were also under construction at the site (the *Barracuda*, *Seawolf, Nautilas* and *Orca*).

Carp was considered a technological wonder, with diesel engines (instead of gasoline) and a "submarine bell system" that could communicate "with points on shore or with another vessel similarly equipped," reported the Hawaiian Star. Additionally she had two periscopes, "an ingenious contrivance," declared the Star. In comparison, just five years earlier, President Teddy Roosevelt had become the first president to experience a submarine dive at Oyster Bay, N.Y. aboard the second submarine to be commissioned into the U.S. Navy. The submarine USS Plunger (renamed A-1) (SS 2) sans periscope went 35 feet and then performed a "porpoise dive [by] rushing to the surface...remaining five or six seconds... [to look for a war ship] and note her location...then [diving] to a safe depth." Still there were fallbacks without modern radar, sonar or guidance systems, which had not yet been invented, and the subs were often at the mercy of the elements. Submarines of the day were referred to as "pups." When lost in fog, a mother supply ship would sound a whistlesiren allowing the sub to rejoin its company. At times, the sub was tethered to the supply ship and towed until the fog subsided and then would be "turned loose and allowed to make its own way," according to an article in the San Francisco Call.

Trouble on the bottom

When the 10 minutes were up, the *Carp* crew "discovered that the [anchor] windlass [winch] would not work." The original plan was to simply reverse the diving process "gradually allowing the *Carp* to rise to the surface." Smith immediately cut the cable, which was the emergency protocol indicated in the event of such an occurrence. Nothing happened. "Without any clear understanding of the force...holding them down, the predicament of the men in the submarine was grave," declared the *Chronicle*.

Carp was in touch by a telephone, the wires having been "rove through a watertight joint in the conning tower," with the surface



Newspaper clipping from the Tacoma Times, Monday April 29, 1912

tender. Surface engineers determined that the "anchor chain...had become entangled in the cable," which prompted its cutting, explained an article in the *Chicago Day Book*. It was then determined that a second cable had "fouled with the submarine's cable and had been jammed with the...hawse pipe."

Smith gave an order to start *Carp*'s engines (which maxed at 17 knots) and ran them at full speed. "The boat still clung immovably to its position at the bottom of the bay," reported the *Chronicle*. The situation began to worsen as the tide began to run. The on-site naval officers became concerned because the tide "runs through the [Raccoon] straights with fearful veloc-

ity." Desperate, Lt. Smith ordered the crew to run from "one end of the narrow alley in the 144 foot submarine to the other... and back again" hoping the vibration would "release the boat. It did not."

Smith concluded that "one chance remained...the compressed air, which would sustain the eight lives for many hours, could be used to blow out the water from the ballast tanks and lighten the boat." He "turned the valve that let the compressed air into the forward tanks." The officers on the tender, seeing the bubbles, "thought they saw confirmation of their [greatest] fear for the eight lives 200 feet below," the press reported. As

Carp began to rise to the surface, Smith and his crew "clung to guards and the rails to save themselves from falling to the depth of what had been a horizontal alley but was now a vertical shaft." The lunch dishes, champagne glasses and bottles "crashed down fifty feet into the stern." On the surface Commander Gove said it was "an anxious hour... We knew they were having trouble...Lt. Smith did not dare to tell us [telephonically] how serious it was for fear of stampeding his crew. If it had lasted much longer, I would have sent for divers and a wrecking outfit."

Breaking the surface

The men on the tender heard an incredible roar and "saw the *Carp* shoot out of the water with tremendous force about a ships length [50 feet] from us...She came out at an angle of 45 degrees and came clear out the water for more than half her length" continued Gove. "We were greatly relieved when everything ended so well," he concluded. The *Chicago Day Book* reported that *Carp* "shot out of the water like a giant whale...Slowly it righted itself, the engines were started and the submarine glided to its moorings." The entire incident had lasted an hour and a half.

Smith downplayed the surfacing, claiming he believed the tender occupants' "idea of the angle [of emergence] is exaggerated." He also claimed that if blowing the ballast hadn't worked, the remaining air "stowed in steel flasks within the boat was sufficient to have lasted the crew for over two months." Smith concluded "no anxiety was felt by any member of the crew as to the outcome of the test."

Another Record Dive

The following September *Carp* did it again by setting a new record at 283 feet in San Francisco Bay. It did so with a full complement of twenty-six seamen gaining the depth and holding it for ten minutes while cruising at 6 knots. The sub remained submerged for six hours continuing its performance tests which, according to the nation's press, were performed "with [the] ease and certainty [of] a sporting porpoise." The dive to 283 feet was considered "[a] remarkable demonstration in submarine navigation."

In mid-October *Carp* was in the news again. This time the press reported "the sub-

marine...diving champion of all the undersea fighting craft" had run aground in Monterey Bay. A chain holding *Carp* to a buoy broke and two seamen were killed when a "big wave...swept over the craft." The sub was towed to Mare Island and repaired.

In 1917, eight months after the United States entered World War I, *Carp F-1* sank off the coast of San Diego (Point Loma). The little record-setting submarine was rammed by a sister sub (USS *F-3* (*SS* 22)) during

tactical maneuvering exercises in fog—still a major problem in submarine surface navigation. Her port side torn forward of the engine room, she sank in 10 seconds. Nineteen sailors were killed with five men surviving the disaster.

Daniel J. Demers holds a degree in history from George Washington University, and a Master Degree in Business Administration from Chapman University. You can view more of his writings at www.danieldemers.com

SOURCES

President on Sea's Bottom Fifty Minutes in Submarine, *St. Louis Republic*, August 26, 1905, page 1 http://chroniclingamerica.loc.gov/lccn/sn84020274/1905-08-26/ed-1/seq-1/#date1=1836&index=16&rows=20&words=1+f+SUBMARINE&searchType=basic&sequence=0&state=&date2=1922&proxtext=Submarine+F-1&y=0&x=0&dateFilterType=yearRange&page=2 (accessed November 23, 2014).

Miss Josephine Tynan to Christen Submarine, San Francisco Call, July 24, 199, page 3 http://chronicling-america.loc.gov/lccn/sn85066387/1911-07-24/ed-1/seq-3/#date1=1836&index=11&rows=20&words=Carp+SUBMARINE+submarine&searchType=basic&sequence=0&state=&date2=1922&proxtext=Submarine+Carp&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 23, 2014).

 $\label{lem:cap} The Wonderful Submarine \textit{Carp}, The Hawaiian Star, September 25, 1911, page 10 http://chroniclingamerica. \\ loc.gov/lccn/sn82015415/1911-09-25/ed-1/seq-10/\#date1=1836&index=7&rows=20&words=Carp+Submarine+submarines&searchType=basic&sequence=0&state=&date2=1922&proxtext=Submarine+Carp&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 23, 2014). \\ \end{aligned}$

Accidents to Submarines Have Cost 187 Lives in 8 Years, *The Citizen*, February 9, 1912, page 3 http://chroniclingamerica.loc.gov/lccn/sn87078082/1912-02-23/ed-1/seq-2/#date1=1836&index=0&rows=20&words=Accident+accidents+submarine+submarines&searchType=basic&sequence=0&state=&date2=1922&proxtext=submarine+accidents&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 25, 2014).

Imprisoned in a Submarine at Bottom of Bay, San Francisco Chronicle, April 18, 1912, page 18

Lieutenant S. B. Smith, Tells Story of Wonderful Test, San Francisco Chronicle, April 18, 1912, page 18

 $Carp\ Gets\ Final\ Test\ in\ Bay\ Today,\ \textit{San\ Francisco\ Call},\ April\ 19,\ 1912,\ page\ 12\ http://chroniclingamerica.loc.\ gov/lccn/sn85066387/1912-04-19/ed-1/seq-12/#date1=1836&index=0\&rows=20\&words=BAY+CARP+FI\ NAL+GETS+TEST+TODAY&searchType=basic&sequence=0&state=&date2=1922&proxtext=Carp+Gets+Final+Test+in+Bay+Today&y=0&x=0&dateFilterType=yearRange&page=1\ (accessed\ November\ 25,\ 2014).$

Crew Faces Death When Submarine Breaks Record on Her Trial Plunge, *Chicago Day Book*, May 8, 1912, page 30 http://chroniclingamerica.loc.gov/lccn/sn83045487/1912-05-08/ed-1/seq-30/#date1=1836&inde x=2&rows=20&words=turkey+wine&searchType=basic&sequence=0&state=&date2=1922&proxtext=turkey+and+wine&y=7&x=15&dateFilterType=yearRange&page=1 (accessed November 15, 2014).

Submarine F-I Now Maneuvering in the Pacific has New Record by Diving to the Depth of 283 feet, Bismarck Daily Tribune, September 16, 1912, page 1 http://chroniclingamerica.loc.gov/lccn/sn85042242/1912-09-16/ed-1/seq-1/#date1=1912&tindex=4&rows=20&words=1+F+SUBMARINE&searchType=basic&sequence=0&state=&date2=1912&proxtext=Submarine+F-1&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 24, 2014).

Champion Diver of Uncle Sam's Swordfish Craft Hurled on Sands in Monterey Bay, San Francisco Call, October 12, 1912, page 11 http://chroniclingamerica.loc.gov/lccn/sn85066387/1912-10-12/ed-1/seq-11/#date1=1 912&index=5&rows=20&words=1+F+Submarine&searchType=basic&sequence=0&state=&date2=1912&proxtext=Submarine+F-1&cy=0&x=0&dateFilterType=yearRange&page=1 (accessed November 24, 2014).

Steamer Supply Will Go To Guam, San Francisco Call, October 17, 1912, page 8 http://chroniclingamerica.loc.gov/lccn/sn85066387/1912-10-12/ed-1/seq-11/#date1=1912&index=5&rows=20&words=1+F+Submarine & searchType=basic&sequence=0&state=&date2=1912&proxtext=Submarine+F-1&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 24, 2014).

Submarine F-1 Sent to Bottom By Sister Boat, New York Evening World, December 19, 1917, page 4 http://chroniclingamerica.loc.gov/lccn/sn83030193/1917-12-19/ed-1/seq-4/#date1=1836&index=4&rows=20&words=1+F+SUBMARINE&searchType=basic&sequence=0&state=&date2=1922&proxtext=Submarine+F-1&y=0&x=0&dateFilterType=yearRange&page=1 (accessed November 24, 2014).

USS F-1 (SS-20), http://en.wikipedia.org/wiki/USS_F-1_(SS-20) (accessed November 24, 2014).



CONTINUITY OF POWER:

How the Nuclear Propulsion Officer Candidate Program prepares the next generation of Nuclear Power Officers

Google, SpaceX, Facebook, Northrup Grumman, GE, the U.S. Navy...

In career fairs across the country, the Naval Nuclear Propulsion Program is in direct competition with the most sought after civilian employers for this nation's best and brightest students. Each semester, these students will prepare their resumes, lace up their dress shoes, and attend career fairs in droves. These career fairs are where the Navy's Recruiting Command will first interact with the talented individuals that will swear the oath and continue the storied tradition of nuclear power operations in the Navy.

On October 13, 1775 the Continental Congress in Philadelphia authorized the purchase of two vessels to employ in the Revolutionary War. Since its creation on that day, the U.S. Navy has played a vital and dynamic role in ensuring national and global maritime security. On January 17, 1955, the USS *Nautilus* (SSN 571) signaled the iconic "Underway on nuclear power" in becoming the first nuclear-powered ship in the Navy. Since that time, the Naval Nuclear Propulsion Program has safely steamed over 156 million miles in over 6,700 reactor-years of operation. The success of this program relies on the training, education, and dedication of the men and women aboard the submarines and aircraft carriers, in the classrooms of Nuclear Power School, and in the halls of Naval Reactors.



Nuclear Propulsion Officer Candidate (NUPOC) Program

To ensure that the next generation of naval leaders is secured, the NUPOC program is offered to students in universities and those who have already graduated around the country. For students that meet physical and academic requirements, the NUPOC program will pay them as an active-duty First Class Petty Officer while they are in school, equating to approximately \$4,000 per month. Unlike those enrolled in ROTC or at the Naval Academy, NUPOC students have very little military obligations. That means no early mornings spent with Marine Corps drill instructors and the freedom to grow the best beard or hairstyle they can muster. NUPOC students simply need to maintain their grades, pass the Navy's physical examination twice a year, and obey the Navy's zero tolerance drug policy. Additionally, those



selecting to be a Submariner or Surface Warfare Officer receive a \$15,000 bonus upon selection into the program. While the monetary benefits may pop off the fliers in the eyes of the students at the career fairs; it is the training, personal development, and the opportunity to serve that are the ultimate highlights of the NUPOC program.

Cmdr. Timothy Yanik is the Director of Submarine and Nuclear Accessions, Navy Recruiting Command and oversees the recruitment of almost 50 percent of the Navy's nuclear trained officer corps through the NUPOC program. There are 14 nuclear-trained lieutenants assigned to Nuclear Accessions at the Navy Recruiting Command headquarters in Millington, TN. These lieutenants, under Cmdr. Yanik's supervision, are responsible for the administration of the NUPOC program. Their responsibilities include assisting recruiters at career fairs throughout the country as well as managing accession of new students into the program. Throughout the application process, they provide guidance to recruiters and mentor applicants as they seek admission into the Naval Nuclear Propulsion Program.

Junior Officers, Leaders First

Be it supervising nuclear power plant operations at sea, teaching the next generation of operators at Naval Nuclear Propulsion Training Command, or leading a team of



senior engineers at Naval Reactors, Junior Officers in the Naval Nuclear Propulsion Program assume leadership responsibility at an accelerated rate that is nearly unmatched by their peers in the civilian sector. As Cmdr. Yanik states, "Very few organizations can immediately offer the responsibility that we entrust our most junior officer cadre with." This leap to a mid-management position immediately following college is an enticing proposition. Make no mistake, being thrust into a leadership role fresh out of college is extremely challenging. However, for motivated students, it is these challenges that offer the opportunity to grow both professionally and personally. The Naval Nuclear Propulsion Program is heavily invested in its people, and no challenge is faced alone. At times the obstacles are daunting and seemingly insurmountable, but with the support and guidance of senior leadership

and the impressive collective knowledge of the enlisted, junior officers are given the tools to adapt and overcome any challenge. There is no value that can be placed on the development of a junior officer's belief in his or her own ability to succeed as a leader.

Thriving in a Technical Environment

Junior officers are integrally involved in the operation of hundreds of ships around the world. As such, there is no aspect of operations that a junior officer is not expected to learn. They must have the academic ability to develop a thorough comprehension of the systems at their disposal so that they may intuitively understand the implications of their decisions, and often they must do so under duress in extreme environments. However, it is not simply enough to master schematics and diagrams. Junior officers must be able to translate that knowledge into action in the form of leading others. They must be able to communicate their thoughts and ideas in formal



From Career Fair to "Raise Your Right Hand"

After a career fair, a select few will begin a process that culminates with an interview with the Director of Naval Reactors, Adm. Richardson, and the swearing of the Oath of Enlistment. The process to join the NUPOC program is built around ensuring each individual's success, not only in the application process but also in his or her career. Students are immediately educated

"Our fleet VIP trips provide an outstanding opportunity for college applicants to see Navy life how it really is, ask the tough questions, and overcome any fears or apprehensions, ..."

settings. No mission is accomplished by any one man or woman. Junior officers will rely on the accumulated knowledge of the enlisted sailors around them. They must be able to evaluate technical guidance to formulate and then implement a plan. This leadership experience and the demonstrated ability to function in the technical environment composed of reactor plant systems and ships' systems are what make junior officers so appealing to the corporate world. As Cmdr. Yanik notes, "The United States Navy and Naval Nuclear Propulsion Program remain tightly aligned as an employer of choice with other top civilian companies. First and foremost, we offer the ability to serve something bigger than oneself and provide technical training and leadership skills that set Submariners and nuclear-trained officers and enlisted apart from their counterparts." For those that elect to continue their military careers, they are rewarded with increased responsibility and further professional development.

about the choices they are making. To produce dedicated and motivated junior officers, it is crucial that they understand the obligations and responsibilities they are incurring from the moment they join the program. To that end, the NUPOC program offers three educational trips to students. Students obtain a first-hand glimpse of the program on these trips and, like all things in the nuclear Navy, showcasing the Naval Nuclear Propulsion Program is a team effort. Ship's duty officers aboard submarines in San Diego and around the country lead tours and speak with students. Nuclear Power School instructors in Charleston, S.C. discuss curriculum and relay their experiences to potential applicants. Naval Reactors Engineers in Washington, D.C. take time from full schedules to meet with applicants and share the incredible opportunities afforded at Naval Reactors. All of these trips are offered at no cost to the applicants.

Cmdr. Yanik says, "First impressions count! Today's college students are very

impressionable. Make no mistake, they are going to check all the facts." These trips offer the students an opportunity to weigh their previous knowledge of the program against a first-hand experience. "Our fleet VIP trips provide an outstanding opportunity for college applicants to see Navy life how it really is, ask the tough questions, and overcome any fears or apprehensions," says Cmdr. Yanik. Submariners know it is no small burden to take the time during a full day to lead a tour for a group of college students. However, the Sailors of the Submarine Force routinely demonstrate a great pride and passion for what they do and, in doing so, play a vital role in ensuring that the next generation of leaders steps forward. "The fleet plays a huge part in overcoming the unknowns of submarine life and nuclear power," says Cmdr. Yanik, who adds, "The overwhelming majority of college students come away from these VIP trips saying, 'Prior to this, I didn't think it was something I'd consider, but now I can really see myself doing this."

In preparation for their final interview in Washington, D.C., students will review physics and calculus to include kinematics and conservation of energy as well as integration and optimization. The nuclear-trained officers in Millington will conduct a one-on-one phone interview with each applicant, verifying that each is ready and well prepared for the interview. Each month, Navy Recruiting Command joins NROTC and the Naval Academy in sending applicants to Washington, D.C. to interview at Naval Reactors. For those selected, the journey of a lifetime begins with taking the Oath of Enlistment.



Lt. Donald Redding commissioned through NROTC at Northwestern University in 2009. He served aboard USS *Pittsburgh* (SSN 720) from March 2011 to November 2013. He is currently assigned to Nuclear Accessions in Navy Recruiting Command Headquarters in Millington, Tenn.



USS Bremerton Beautifies Fischer Park

During a port visit to her namesake, USS *Bremerton* (SSN 698) Sailors participated in a joint effort with the Bremerton-Olympic Peninsula Council of the U.S. Navy League and Kitsap County in beautifying Fischer Park in East Bremerton, Feb. 28.

The USS *Bremerton* crew continued its efforts to strengthen rapport with the community since being jointly adopted by the City of Bremerton and the Navy League Bremerton-Olympic Peninsula Council in 2011.

"We are excited to bring the namesake of the city back home and give back," said Command Master Chief Wade Tandberg, a native of Renton, Washington, and USS *Bremerton's* Chief of the Boat. "I'm proud to see my crew taking part in showing our appreciation for the City of Bremerton and its support."

The Sailors were estimated to have cleared more than two tons of debris and shrubbery at the park and laid approximately 140 feet of bed work according to Marion Hersey, a Kitsap County Veterans Advisory Board member who coordinates local veteran memorial clean ups weekly.

"I normally reach out to Naval Base Kitsap or ships pulling in to support clean-up efforts," said Hersey. "These Sailors came out here ready to give their time and do great work."

"It's nice to come out here and see the town and help the community," said Machinist's Mate Fireman Kyle McClanahan, a native of Oklahoma City assigned to USS *Bremerton*. "The city's been a fantastic host and I can't wait to come back when we decommission."

Sailors First

Navy Accepting Applications for FY16 Selections

The Navy is seeking senior enlisted Sailors to serve on Fiscal Year 2016 active-duty and Reserve master chief, senior chief, and chief petty officer selection boards, according to a message released Oct. 9.

According to NAVADMIN 235/14, active and Reserve component master chiefs are encouraged to apply to serve on a board. Frocked master chiefs may also participate in the selection board process. There are no restrictions on active-duty serving on reserve boards or reserve/full-time support serving on active boards.

Senior chief petty officers may also serve on the active or reserve E-7 boards as either members or recorders. They may only serve as recorders on the E-9 or E-8 boards. Chief petty officers may serve as recorders on E-9, E-8 and E-7 selection boards. Applicants should not discuss their application with any members from their command, other than those required to review their application.

Frank Cable Sailors Look to Advance

Sailors assigned to the submarine tender USS *Frank Cable* (AS 40) participated in the Navy-wide Petty Officer 1st Class advancement exam, March 5.

Sailors from across the fleet participate in the exam the first Thursday of every March and September in hopes of advancing to the rank of petty officer 1st class.

"It gives people an opportunity to become more than what they are; to be a leader," said Personnel Specialist 1st Class Trinity Matthews, education service officer for the E-6 exam. "It gives them an opportunity to strive for something better."

Frank Cable is currently moored in Sasebo, Japan, for a port visit, which can present challenges to some Sailors in the weeks leading into the exam.

"You can't just go home and open your books, so you have to find a spot and get away from everybody; but everybody is always here," said Matthews. "You also sometimes have to resist the temptation to go out on liberty. It might be difficult, but it's possible."

For some, being underway minimizes distractions and has actually proven to be a better study environment for advancement.

"I've found it's a lot easier to study underway due to the fact that there's no distraction other than your job," said Electronics Technician 2nd Class Joshua Miller. "It's not like I have the home, wife and animals to take care of. When I go home, I've got to think about all that and then study. Now I just do my job and then instead of going home I'm right here studying."

Aside from passing the exam and advancing, the Navy's newest first class petty officers must also be ready to grow into the role and lead Sailors to success.



Welcome Home!

Machinist's Mate 1st Class
Anthony Cushman holds his son
for the first time following his
return aboard the Los Angelesclass attack submarine USS San
Francisco (SSN 711) to Naval
Base Point Loma after completing
an extended seven-month deployment. San Francisco executed
the Chief of Naval Operations'
maritime strategy in supporting
national security interests and
maritime security operations.

Photo by Mass Communication Specialist 2nd Class Kyle Carlstrom

Sailors First

Submarine Force U.S. Pacific Fleet Sailors of the Year Announced

Sea and Shore Sailors of the Year (SOY) for Commander, Submarine Force U.S. Pacific Fleet (COMSUBPAC) were announced Feb. 27 following a week of events where 9 SOY candidates representing various commands from the Pacific submarine community competed for the distinguished title.

The 2014 Sea Sailor of the Year was awarded to Yeoman 1st Class William Kennedy, from the *Los Angeles*-class submarine USS *San Francisco* (SSN 711).

The 2014 Shore Sailor of the Year was awarded to Navy Counselor 1st Class Sarah Dozier, from Commander, Submarine Group 9.

Also selected to compete in the competition were:

LS1 (SW/AW) Jonathan Lee, USS Frank Cable (AS 40)

MM1 (SS) Christopher Smith, USS Ohio (SSGN 726) (B)

HM1 (SS/FMF) Jose Delgado, USS Columbia (SSN 771)

ND1 (DSW/SS/SW) Kristoffer Ilagan, Undersea Rescue Command STG1 (SW) Brandon Ronne, Naval Ocean Processing Facility, Whidbey Island

FT1 (SS) Kevin MaClean, Commander, Submarine Squadron 15 YN1 (AW) Angela Fiorucci, Commander, Submarine Force, U.S. Pacific Fleet

All candidates were honored during a luncheon Feb. 27, where Rear Adm. Phillip Sawyer, COMSUBPAC, congratulated the candidates.

"You are truly the tip of the spear of the submarine force and represent us very well." he said. "I applaud what you have achieved and look forward to what you will accomplish in the future."

Both Sailors now go on to represent the Pacific submarine force in the Commander, U.S. Pacific Fleet Sailor of the Year competition.

Standard Operating Procedures Available to Assist Personnel Actions

The Pay and Personnel Administrative Support System (PASS) program has created more than 30 standard operating procedures (SOP) to help Sailors perform their day-to-day personnel activities like travel

claims and updating records Navy administrators said recently.

The SOPs are accessed through the Manpower, Personnel, Training and Education (MPT&E) intranet on any command access card-enabled computer. A fact sheet is available to show you how to access the



SOPs as part of Navy Personnel Command's Plain Talk series at www. npc.navy.mil/career/toolbox/Pages/PlainTalk(series).aspx.

Travel claims are just one of the many things covered by the SOPs, other subjects include special pays, basic housing allowance, fleet reserve and retirement requests, updating emergency data and transfers to mention a few.

"The CPC exists to support the Sailor, and Sailors can educate themselves and help their CPCs at the same time by knowing what they need to do in order to get processes done," said Smith. "It is the Sailor's career, so we want them to have the tools to make it run as smoothly as possible."

SUBLANT Recognizes 2014 Sailors of the Year

The 2014 Commander, Submarine Force Atlantic (SUBLANT) Senior and Junior Sailors of the Year (SOY) were announced March 5, during a ceremony held at the Pennsylvania House, Naval Station Norfolk.

The 2014 SUBLANT Senior Sea Sailor of the Year was Petty Officer First Class Bradley Monell, a submarines-qualified and nuclear-trained electrician's mate assigned to USS *Maryland* (SSBN 738).

Petty Officer First Class Kwelisha Jackson was recognized as the 2014 SUBLANT Senior Shore Sailor of the Year. She is a surface warfare and information dominance warfare qualified information systems technician who was assigned to the Operational Control Center on the staff of Commander, Submarine Force Atlantic, headquartered in Norfolk, Va., during the competitive cycle. She is currently assigned to Commander, Carrier Group 5 in Yokosuka, Japan.

Bradley Monell and Kwelisha Jackson will represent SUBLANT in the Atlantic Fleet Sailor of the Year competition conducted by Commander, U.S. Fleet Forces Command (USFFC). The fleet competition will be held later in March with other Atlantic Fleet type command winners. The Atlantic Fleet Sea Sailor of the Year winner from that competition will be meritoriously advanced to chief petty officer, while the Atlantic Fleet Shore Sailor of the Year winner will enter the Chief of Naval Operations competition in Washington, D.C.

The 2014 SUBLANT Junior Sea Sailor of the Year was Petty Officer Second Class Timothy Wright, a submarines-qualified sonar technician assigned to USS *Toledo* (SSN 769) and the 2014 SUBLANT Junior Shore Sailor of the Year was Petty Officer Second Class Kolbjorn Skaflestad a submarines-qualified sonar technician assigned to the Naval Submarine Support Facility in New London, Conn.

The other candidates for Senior Sea Sailor of the year were Petty Officer First Class Heath Spencer, a submarines-qualified electronics technician assigned to USS *San Juan* (SSN 751), and Petty Officer First Class Daniel Wayland, a submarines-qualified electronics technician assigned to USS *Norfolk* (SSN 714).

Petty Officer First Class Alexander Kaehr, a submarines-qualified and nuclear-trained electrician's mate assigned to the Navy Regional Maintenance Department, Kings Bay, Ga., and Petty Officer First Class Alan Lemire, an air warfare-qualified master-at-arms at the Naval Submarine Support Center in New London, Conn., were the other finalists for Senior Shore Sailor of the Year.

The other candidates for Junior Sea Sailor of the Year were Petty Officer Second Class William Hayes, a submarines-qualified machinist's mate who was assigned to USS *Rhode Island* (SSBN 740) during the competitive cycle. He is currently assigned to the Trident Training Facility, Kings Bay, Ga., and Petty Officer First Class Ross Lewis is a submarines-qualified machinist's mate from USS *Montpelier* (SSN 765). Lewis was advanced to first class near the end of calendar year 2014.

Finalists for Junior Shore Sailor of the Year were Petty Officer Second Class Shazrika Charles, a yeoman assigned to the headquarters staff at Commander, Submarine Force Atlantic, in Norfolk, Va., and Petty Officer Second Class Casey Gore, a surface warfare-qualified hull technician assigned to the Nuclear Regional Maintenance Department, Kings Bay, Ga.

Undersea Warfare magazine has created this new section in recognition of the enlisted Submariner—but we want <u>you</u> to get involved in the success of this effort. We would like you to send us "Community Outreach," or "Liberty" photos, and/or "Homecoming" photos of families being re-united as the crews return.

Send your submissions to the Military Editor via email to: underseawarfaremagazine@hotmail.com

Changes of Command

COMSUBRON 1

Capt. Timothy A. Rexrode relieved Capt. Harry L. Ganteaume

COMSUBGRU 7

Rear Adm. William Merz relieved Rear Adm. Stuart B. Munsch

COMSUBRON 17

Capt. Mark W. Schmall relieved Capt. Mark D. Behning

Regional Support Group, New London

Capt. Gerhard Somlai relieved Capt. Richard Verbeke

Navy Submarine Support Command,

Cmdr. Robert Jezek relieved Capt. Eugene Nemeth

USS *Alaska* (SSBN 732) (B) Cmdr. Dave Forman relieved Cmdr. Todd Figanbaum

USS *Annapolis* (SSN 760) Cmdr. Kurt Balagna relieved Cmdr. Chester Parks

USS *California* (SSN 781) Cmdr. Eric Sager relieved Cmdr. Shawn Huey

USS *Florida* (SSGN 728) (B) Capt. Nate Martin relieved Capt. Owen Travis

USS *Missouri* (SSN 780) Cmdr. Frazer Hudson relieved Cmdr. Mike Luckett

USS *New Hampshire* (SSN 778) Cmdr. Jason Weed relieved Cmdr. Sean Fujimoto

USS *Tennessee* (SSBN 734) (B) Cmdr. Charles McLenithan III relieved Cmdr. John Howrey

Qualified for Command

Lt. Cmdr. James Brooks USS Maine (SSBN 741) (G)

Lt. Ralph Buckles USS *Georgia* (SSGN 729) (G)

Lt. Cmdr. Trevor Conger COMSUBRON 1

Lt. Jeremy Dawson USS Jefferson City (SSN 759)

Lt. Cmdr. Jess Feldon USS *Asheville* (SSN 758)

Lt. Ryan Gieleghem USS Jefferson City (SSN 759)

Lt. Steven Halle USS *Missouri* (SSN 780)

Lt. Lewis Im USS *Olympia* (SSN 717) Lt. Eric Knepper USS Annapolis (SSN 760)

Lt. Cmdr. Seth Krueger USS *Chicago* (SSN 721)

Lt. Kyle McVay COMSUBRON 1

Lt. Cmdr. Michael Mowry COMSUBRON 11

Lt. Scotty Murphy USS *Chicago* (SSN 721)

Lt. Vincent Ragona COMSUBGRU 10

Lt. Justin Reeves USS *Maine* (SSBN 741) (B) Lt. Christian Rivera COMSUBDEVRON 5

Lt. Cmdr. Timothy Rochholz USS Jefferson City (SSN 759)

Lt. Cmdr. Christopher Rose COMSUBRON 1

Qualified in Submarines

Lt. j.g. Scott Adams USS North Carolina (SSN 777)

Lt. j.g. Jarrod Alford USS *Tennessee* (SSBN 734) (B)

Lt. j.g. James Allen USS Key West (SSN 722) Lt. j.g. Robert Alvarado USS *Wyoming* (SSBN 742) (B)

Lt. j.g. Ojevwe Avworo USS West Virginia (SSBN 736)

Lt. j.g. Mark Baker USS *Hawaii* (SSN 776)

Lt. j.g. Sinon Bennett USS *Hawaii* (SSN 776)

Lt. j.g. Casey Burgener USS *North Carolina* (SSN 777)

Lt. j.g. Austin Carney USS Tennessee (SSBN 734) (B)

Lt. j.g. Paul Carpenter USS *Hampton* (SSN 767)

New 3-D Simulator Generates Training, Expertise on Subs

A new diesel generator simulator has been delivered to Pearl Harbor naval facilities by the TechSolutions program at the Office of Naval Research (ONR), officials at ONR announced March 18.

High-fidelity 3D software will allow Sailors to use 50-inch touch screens to see and access all parts of the massive generators aboard *Virginia*-class subs.

The Navy's *Virginia*-class submarines are among the most technically advanced vessels ever built. But even these cutting-edge, fast-attack, nuclear-powered boats need emergency generators on hand and Sailors trained to operate and repair them.

"This will be a big help for the fleet, getting Sailors more training time and providing potentially significant cost savings," said ONR Command Master Chief Jessie Thomas. "It has been challenging for all the Sailors who need training on these generators to get enough work time on the actual boats-particularly given that the subs can be out to sea for extended periods.

Sailors train on a new diesel generator simulator during a project review at Naval Air Warfare Center Training Systems Division in Orlando, Fla. Photos by Darrell Conley

"A state of the art simulator allows far Division in 0 more time to learn how these complex machines work."

As Sailors are being trained on the simulator, they are able to touch different parts of the screen to view and access all parts of the complex generators, even moving virtual controls and twisting virtual knobs to make adjustments based on digital data or sight inspection.

The advanced 3D program-called the Multipurpose Reconfigurable Training System (MRTS)-will provide estimated cost avoidances of \$27 million over building more generators for training, freeing up funds for significant expansion of training capabilities. The improvements include expansion of



A new diesel generator simulator at Naval Air Warfare Center Training Systems Division in Orlando, Fla.

the Machinery Room where the simulators will be placed, allowing greater immersion and multiplemission scenarios that until now had been largely confined to the classroom.

"The beauty of the system is that it should reduce the amount of lab time, while increasing the scenarios the instructor can put the students through," said Darrell Conley, project manager for Virginia diesel program at Naval Air Warfare Training Systems Division. "The software can be loaded on any MRTS 3D trainer in the fleet, allowing any boat to schedule required training."

DOWNLINK

Lt. j.g. David Chucoski USS *Boise* (SSN 764)

Lt. j.g. Peter Cramer USS North Carolina (SSN 777)

Lt. j.g. Sean Croghan USS Key West (SSN 722)

Lt. j.g. Geoffrey Fastabend USS *Kentucky* (SSBN 737) (G)

Lt. j.g. Alexander Ford USS *Newport News* (SSN 750)

Lt. j.g. Matthew Geddings USS *Tennessee* (SSBN 734) (B)

Lt. j.g. Neal Holmes USS *Chicago* (SSN 721)

Lt. j.g. Eric Jimenez USS Santa Fe (SSN 763)

Lt. j.g. Bryan Keck USS *Pasadena* (SSN 752)

Lt. j.g. Zachary Landaal USS *Nevada* (SSBN 733)

Lt. j.g. Christopher Malone USS *Henry M. Jackson* (SSBN 730) (B)

Lt. j.g. Zachary McIntyre USS *Hawaii* (SSN 776) Lt. j.g. Megan Mittleider USS *Maine* (SSBN 741) (B)

Lt. j.g. Jared Mosier USS *Nevada* (SSBN 733) (B)

Lt. j.g. Kevin Neumeister USS *Chicago* (SSN 721)

Lt. j.g. Christopher Novitch USS *Pennsylvania* (SSBN 735) (G)

Lt. j.g. Peter Poppalardo USS *Topeka* (SSN 754)

Lt. j.g. Patrick Quealy USS *Columbus* (SSN 771)

Ens. Anthony Read USS *Pennsylvania* (SSBN 735) (B)

Lt. j.g. William Richardson USS *Nevada* (SSBN 733)

Lt. Matthew Roberts USS *Hawaii* (SSN 776)

Lt. Karl Royston COMSUBRON 17

Lt. j.g. Alex Scaperotto USS North Carolina (SSN 777)

Lt. j.g. Noah Singer USS *Nevada* (SSBN 733)

USS Hawaii visits Yokosuka

The *Virginia*-class fast-attack submarine USS *Hawaii* (SSN 776) returned to Fleet Activities Yokosuka Feb. 5 for a visit as part of its deployment to the Western Pacific.

Hawaii's crew of 134 has been underway in the Pacific on a successful deployment for several months.

"The *Hawaii* crew has been excited to meet the challenges and experiences we have tackled so far in this Western Pacific deployment," said Cmdr. William Patterson, commanding officer of *Hawaii*.

Many of the crew members were excited to have the opportunity to visit Japan again.

"I really love the Japanese culture," said Machinist's Mate Fireman Oszaldo Guiterrez. "It's very different than what I've experienced before. I never thought I would visit [Japan], but am even more excited to go back. I want to visit some historic temples and sites that I wasn't able to see last time."

Lt. j.g. Aaron Smith USS West Virginia (SSBN 736) (B)

Lt. j.g. Dallas Smith USS *Rhode Island* (SSBN 740) (B)

Lt. j.g. Jero Smith USS *North Carolina* (SSN 777) Lt. j.g. Patrick Snow USS West Virginia (SSBN 736) (B)

Lt. j.g. Steven Snow USS *Norfolk* (SSN 714)

Lt. j.g. Tyler Sordelet USS *Louisville* (SSN 724)

2014 Battle "E" Winners

The Battle E competition is conducted to strengthen individual command performance, improve overall force readiness, and to recognize outstanding performance. The award symbolizes the overall readiness of the command to carry out its assigned wartime tasks as a unit of the Atlantic Submarine Force.

COMSUBLANT Battle "E" winners, and commanding officers are:

USS *Virginia* (SSN 774), SUBRON4, commanded by Cmdr. Steven Antcliff. (Groton, Conn.)

USS *Boise* (SSN 764), SUBRON 6, commanded by Cmdr. Scott Luers. (Norfolk, Va.)

USS *Annapolis* (SSN 760), SUBDEVRON 12, commanded by Cmdr. Chester Parks. (Groton, Conn.)

USS *Georgia* (SSGN 729), SUBRON 16, commanded by Capt. William Breitfelder (B) and by Capt. Rhett Jaehn and Capt. Michael Badorf (G). (Kings Bay, Ga.)

USS *Alaska* (SSBN 732), SUBRON 20, commanded by Cmdr. Todd Figanbaum (B) and by Cmdr. Robert Wirth and Cmdr. Craig Gummer (G). (Kings Bay, Ga.)

COMSUBPAC Battle "E"winners, and commanding officers are:

USS *Greeneville* (SSN 772), SUBRON 1, commanded during the competition by Cmdr. Martin Muckian and Cmdr. Gabriel Anseeuw. (Pearl Harbor, Hawaii)

USS *Seawolf* (SSN 21), SUBDEVRON 5, commanded during the competition by Cmdr. Broderick Berkhout and Cmdr. Jeff Bierley. (Bangor, Wash.)

USS *Columbia* (SSN 771), SUBRON 7, commanded by Cmdr. J. Patrick Friedman. (Pearl Harbor, Hawaii)

USS *San Francisco* (SSN 711), SUBRON 11, commanded by Cmdr. Jeffery Juergens. (San Diego, Calif.)

USS *Chicago* (SSN 721), SUBRON 15, commanded by Cmdr. Lance Thompson. (Guam)

USS *Maine* (SSBN 741, SUBRON 17, commanded by Cmdr. William Johnson (B), and Cmdr. Dale Klein (G). (Bangor, Wash.)

USS *Michigan* (SSGN 727) (G), SUBRON 19, commanded by Capt. Benjamin Pearson. (Bangor, Wash.)

Submarine Tender Frank Cable (AS 40), home-ported in Guam

Special Category, was awarded to auxiliary repair Floating Dry Dock *Arco* (ARDM 5), the torpedo weapons retriever *Devil Ray* (TWR 6) and Undersea Rescue Command (URC).

Lt. j.g. Joshua Straka USS *Alexandria* (SSN 757)

Lt. j.g. Viet Vo USS *Pennsylvania* (SSBN 735) (G)

Lt. j.g. Keith Wilson USS *North Carolina* (SSN 777)

Lt. j.g. Tarik Yameen USS *Rhode Island* (SSBN 740) (B)

Lt. j.g. Brett Zimmerman USS *North Carolina* (SSN 777)

Lt. j.g. Michael Zurbrick USS *Pennsylvania* (SSBN 735) (G)

Qualified Nuclear Engineering Officer

Lt. j.g. Scott Adams USS North Carolina (SSN 777)

Lt. j.g. Alex Angelillo USS *Kentucky* (SSBN 737) (B) Lt. j.g. Tyler Arp USS *Hampton* (SSN 767)

Lt. j.g. Bryan Boldon USS *Cheyenne* (SSN 773)

Lt. j.g. Brett Bonds USS *Annapolis* (SSN 760)

Lt. j.g. Justin Branley USS *Alexandria* (SSN 757)

Lt. Cory Brown USS *Montpelier* (SSN 765)

Lt. j.g. Joseph Buckley USS *Alaska* (SSBN 732) (G)

Lt. j.g. Matthew Buechner USS Oklahoma City (SSN 723)

Lt. j.g. Joshua Calton USS San Juan (SSN 751)

Lt. j.g. Mark Cappo USS *Pennsylvania* (SSBN 735) (B)

Chicago Sailors volunteer at Soup Kitchen

Sailors aboard the *Los Angeles*-class fast-attack submarine USS *Chicago* (SSN 721) participated in a community relations (COMREL) project by volunteering at The Willing Hearts Soup Kitchen during a scheduled port visit in Singapore, March 23.

"The Willing Hearts COMREL was a great success," said Electronics Technician 1st Class James M. Perry. "The amount of work that is done at Willing Hearts is astounding."

Ten *Chicago* Sailors joined 20 other volunteers and assisted in preparing and packaging more than 4,600 meals that were distributed to 54 locations across Singapore.

"Our volunteers were quickly put to work cooking and portioning chicken, assembling bento boxes in an assembly line, loading the meals into the delivery vans, and breaking out frozen and dry foods for the following day," said Perry. "By 11 a.m. we had exceeded the target of 4,670 meals and started to break down and clean up for lunch."

Lt. Joseph Daniel USS *Columbia* (SSN 771)

Lt. Justin Devillar USS *Jimmy Carter* (SSN 23)

Lt. j.g. Preston Dickson USS *Georgia* (SSGN 729) (B)

Lt. James Dorman USS *Hampton* (SSN 767)

Lt. j.g. Connor Dunlop USS *Buffalo* (SSN 715)

Lt. j.g. David Erwert USS *Ohio* (SSGN 726) (B)

Lt. j.g. Jon Faile USS Virginia (SSN 774)

Lt. j.g. Anthony Ford USS *North Dakota* (SSN 784)

Lt. j.g. Miles Garrett USS Maine (SSBN 741) (B)

Lt. j.g. Kyle Gayle USS *Newport News* (SSN 750)

Lt. j.g. Nicholas Geraci USS *New Hampshire* (SSN 778)

Lt. j.g. Anthony Giampa USS *Houston* (SSN 713)

Lt. j.g. Taylor Goode USS *Chicago* (SSN 721)

Lt. j.g. Michael Guibas USS *Albuquerque* (SSN 706)

Lt. j.g. John Horgan USS *North Dakota* (SSN 784)

Lt. j.g. Edward Horn USS *La Jolla* (SSN 701)

Lt. j.g. Maxx Irelan USS *Maryland* (SSBN 738) (B) Lt. j.g. James Kelly USS North Carolina (SSN 777)

Lt. Scott Kennicott USS *Nevada* (SSBN 733) (G)

Lt. j.g. Michael Lassiter USS *Miami* (SSN 755)

Lt. j.g. Richard Lauber USS *Connecticut* (SSN 22)

Lt. j.g. David Lee USS *Key West* (SSN 722)

Lt. j.g. Jasmine Lee USS Wyoming (SSBN 742) (B)

Lt. j.g. Mark Maliniak USS *Alaska* (SSBN 732) (G)

Lt. j.g. Megan Maloney USS *Florida* (SSGN 728) (G)

Lt. j.g. Emma McCarthy USS *Georgia* (SSGN 729) (B)

Lt. j.g. Timothy Mendoza USS *Toledo* (SSN 769)

Lt. j.g. Benjamin Mooney USS San Juan (SSN 751)

Lt. j.g. Daniel Newhouse USS *Alaska* (SSBN 732) (G)

Lt. j.g. Michael Overton USS *Alabama* (SSBN 731) (G)

Lt. j.g. Moses Park USS *Michigan* (SSGN 727) (G)

Lt. Nicholas Nussbaum USS *Rhode Island* (SSBN 740) (B)

Lt. Chris Odom USS *Rhode Island* (SSBN 740) (G)

Lt. Kevin Plumer USS *Columbia* (SSN 771)

Norfolk Naval Shipyard successfully

undocked USS Maryland

SSBN 738 is now pier-side to finish its Engineered Refueling Overhaul (ERO), a complex, major shipyard availability at the submarine's mid-life point that enables the submarine to operate for its entire design service life.

Some of the major jobs during the availability include ship systems overhaul, specifically the replacement of distilling plants with a reverse osmosis unit; replacement of the service turbine generator rotor with a low-sensitivity rotor; installation of an upgraded 500 kilowatt motor generator; and local area network upgrades.

Undocking was achieved despite high winds challenging crane service, unusually cold weather preventing the normal process of washing down the dry dock, and several inches of snowfall. When it



became apparent the effort might fall short of maintaining the planned undocking date, volunteers pitched in from around the shipyard to assist.

"The team has shown great perseverance and refused to give up," said Project Superintendent John Darlington. "It took the entire shipyard to help us get through the snow event, and we have proven that when everyone works together we can be successful. This is a proud project team and we will continue to work together to give the shipyard more successes in the future."

In addition to the small amount of production work to still be accomplished on the boat, system testing and certification and Ship's Force training will be conducted, culminating in sea trials later this year.

DOWNLINK

Lt. j.g. Patrick Rawlinson USS *Maine* (SSBN 741) (B)

Lt. j.g. Jeffrey Reilly USS Virginia (SSN 774)

Lt. j.g. Nicholas Reinsvold USS *Columbus* (SSN 771)

Lt. j.g. Jonathan Register USS *Rhode Island* (SSBN 740) (B)

Lt. j.g. Justin Rogers USS *Charlotte* (SSN 766)

Lt. j.g. Barret Schlegelmilch USS Seawolf (SSN 21)

Lt. j.g. Alexander Scott USS *Mississippi* (SSN 782)

Lt. j.g. Ryan Shinnick USS Scranton (SSN 756)

Lt. j.g. Michael Smith USS Kentucky (SSBN 737) (G)

Lt. j.g. Elmore Smoak USS *Chicago* (SSN 721)

Lt. j.g. Patrick Snow USS West Virginia (SSBN 736) (B)

Lt. Jin Song USS Maine (SSBN 741) (B)

Lt. j.g. Rafael Vargas USS *Providence* (SSN 719)

Lt. j.g. Nicholas Viola USS *Pennsylvania* (SSBN 735) (B)

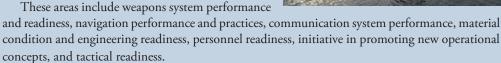
USS Pennsylvania Wins Trident Award

The Blue and Gold crews of USS *Pennsylvania* (SSBN 735) were named as the recipients of the 2014 Trident Submarine Outstanding Performance Award Feb. 13 in a letter signed by Commander, Submarine Force U.S. Pacific Fleet Rear Adm. Philip G. Sawyer.

The award, which is also known as the Olympic Bowl Trophy, is presented annually by the

Bremerton-Olympic Peninsula Council of the Navy League to the top ballistic missile submarine (SSBN) in the U.S. Pacific Fleet.

The *Pennsylvania* crews demonstrated quiet consistency throughout 2014, spending two-thirds of the year supporting the nation's strategic deterrence mission. They also achieved superior marks in every external validation of readiness during the year, a process that helps determine the award recipient.



In 2014, *Pennsylvania* set the record for the longest strategic deterrent patrol recorded since the beginning of the Poseidon C3 ballistic missile program in the early 1970s. That feat, coupled with a total of more than 27,000 nautical miles traveled over the course of the year, highlights the significant endurance and versatility of the *Ohio*-class SSBN fleet.

The two crews are scheduled to receive the Olympic Bowl Trophy during the Armed Forces Gala in Bremerton, Wash., May 16.

Lt. j.g. Ernest West USS Jacksonville (SSN 699)

Lt. j.g. Patrick Wiedorn USS *Oklahoma City* (SSN 723) Lt. j.g. Tyler Williams USS Newport News (SSN 750)

Lt. j.g. Aaron Wilson USS Henry M. Jackson (SSBN 730) (G)

Lt. j.g. Blair Woolheater USS *Annapolis* (SSN 760)

Lt. j.g. Brian Yaptinchay USS Santa Fe (SSN 763)

USS Hawaii participates in ASWEX

The *Virginia*-class fast-attack submarine USS *Hawaii* (SSN 776) participated in the 2015 Anti-Submarine Warfare Exercise (ASWEX) with the Japan Maritime Self-Defense Force (JMSDF) as part of their Western Pacific deployment Feb. 8-16.

ASWEX is an annual event hosted by the JMSDF that included four JMSDF submarines, one U.S. submarine, three surface vessels and multiple aircraft in 2015.

"Hawaii is grateful for the opportunity to have participated in [ASWEX] 2015," said Cmdr. William Patterson, commanding officer of Hawaii. "It was an extremely rewarding experience for the crew. This is exactly what our mission here in the Pacific is strengthening partnerships with our allies while focusing on making ourselves the best Submariners possible."

The long-standing partnership is strengthened with the participation of a U.S. submarine, each crew gaining experience of the tactics and tenacity of their Japanese counterparts.

"[ASWEX] was an amazing experience," said Lt. j.g. Joshua Sale. "Being able to work with and learn from the Japanese showed me just how very capable they are as Submariners. It took a lot of imagination to try and think like the captain of a JMSDF submarine planning its next move. I definitely won't forget this experience."

Medical Officer Qualified in Submarines

Lt. Joel Braman Explosive Ordnance Disposal Expeditionary Support Unit 1 (EODESU 1)

Cmdr. Jose Henao Naval Special Warfare Development Group (DEVGRU)

Lt. Grace Landers Naval Special Warfare Logistics Support Unit 3/SDVT-1





USS Colorado Keel Laying

by Team Subs Public Affairs

The U.S. Navy held a keel laying ceremony for the *Virginia*-class submarine Pre-Commissioning Unit (PCU) *Colorado* (SSN 788) at General Dynamics Electric Boat on March 7.

The initials of the submarine's sponsor, Annie Mabus, were welded onto a steel plate that will be permanently affixed to the submarine. Annie is the daughter of Secretary of the Navy Ray Mabus.

"Colorado's keel laying is a special day for our Navy, the state of Colorado, and our shipbuilding partners," said Rear Adm. David Johnson, Program Executive Officer for Submarines. "This event marks the first major construction milestone for the submarine and helps forge a special bond between Ms. Mabus and her submarine that will last for years to come."





Photos by Mass Communications Specialist 2nd Class Armando Gonzales

USS *Colorado* began construction in March 2012 and is on track to continue the *Virginia*-class program's trend of delivering submarines earlier than their contract delivery dates, within budget, and ready for tasking by the fleet.

Colorado is the fourth ship to bear the name of the state. Colorado is also the 15th submarine of the Virginia class and the fifth of the eight-ship Block III construction contract. Virginia-class submarines are built jointly by General Dynamics Electric Boat and Huntington Ingalls Industries-Newport News Shipbuilding. So far, 28 Virginia-class submarines have either been delivered, are in construction, or are under contract.

In addition to *Colorado*'s keel laying, other *Virginia*-class milestones within the past year include the keel laying of PCU *Illinois* (SSN 786), the christening of USS *John Warner* (SSN 785), and the keel laying of PCU *Washington* (SSN 787).



Submarine Museums and Memorials



USS Cobia (SS 245) Manitowoc, Wis.

Named for a sleek fish with a shark-like appearance, USS *Cobia* (SS 245) was launched Nov. 28, 1943 by Electric Boat Co., Groton, Conn., sponsored by Mrs. C.W. Magruder. She was commissioned March 29, 1944, with Lt. Cmdr. A.L. Becker in command.

On June 26, 1944, *Cobia* put to sea from Pearl Harbor on her first war patrol bound for the Bonin Islands. From July 13 to 20, she sank three Japanese freighters and, in a running gun battle, three small armed ships. One of the small ships rammed *Cobia*, causing minor damage, but she continued her mission, sinking a 500-ton converted yacht on Aug. 5, taking a survivor as her first prisoner of war.

After refitting at Majuro from Aug. 14 to Sep. 6, 1944, *Cobia* sailed into the Luzon Straits on her second war patrol, enduring repeated attacks by Japanese aircraft. On Oct. 22, she rescued two survivors of a Japanese ship sunk by one of *Cobia's* sister boats.

On Nov. 5, she put into Fremantle to refit and departed on her third war patrol Nov. 30. On Jan. 14, she sank the minelayer *Yurishima* off the southeast coast of Malaya. The next day she rescued two Japanese who had been adrift for 40 days on a raft.

She refitted at Fremantle from Jan. 24 to Feb. 18, 1945 and then sailed to the Java Sea for her fourth war patrol. On Feb. 26, she engaged two "sea trucks" with her deck gun, one of which resisted with machinegun fire that killed one of *Cobia's* crew and damaged her radar

equipment. After sinking both sea trucks, *Cobia* interrupted her patrol for repairs at Fremantle from March 4 to 8 and then returned to the Java Sea. On April 8, she rescued seven surviving crewmen from a downed B-24 Liberator.

Cobia replenished at Subic Bay from April 15 to May 9, 1945 and set out for the Gulf of Siam on her fifth war patrol. On May 14, she attacked Tottoori Maru but was driven deep by depth charges from a minesweeper. Cobia's poor luck on this patrol changed on June 8 when she contacted a tanker convoy and sank both the tanker Hatsutaka and the landing craft Hakusa. She refitted once more at Fremantle between June 18 and July 18 and then sailed for her sixth and final war patrol. After landing intelligence teams along the coast of Java on July 27, Cobia served as lifeguard during air strikes on Formosa until the end of hostilities.

She was decommissioned in May 1946. Between 1946 and 1970, she was recommissioned twice, and served as a reserve training ship in New London, Conn. and Milwaukee, Wis. In 1970, *Cobia* was decommissioned and towed to Manitowoc to serve as a memorial to Submariners. In 1986, *Cobia* was incorporated as a part of the Manitowoc Maritime Museum, declared a National Historic Landmark, and placed on the National Register of Historic Places. USS *Cobia* made an unforgetable name for herself in WWII by sinking 13 enemy vessels totaling 16,835 tons and receiving four battle stars.